OUTLINE OF THE RESEARCH PROPOSAL SUBMITTED FOR THE TOPIC FOR DOCTOR OF PHILOSOPHY IN MANAGEMENT STUDIES

Title of the proposal:	"To Study the Impact of Positive Risk Management on Project Performance with Reference to IT Project Management in Maharashtra"
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1. Title of the Research Proposal

TO STUDY THE IMPACT OF POSITIVE RISK MANAGEMENT ON PROJECT PERFORMANCE WITH REFERENCE TO IT PROJECT MANAGEMENT IN MAHARASHTRA

2. Brief Introduction of The Research Theme

2.1 Introduction

The success of any project depends on various factors such as effective planning, efficient execution, and sound risk management practices. In today's dynamic business environment, project managers face numerous risks that can impact the project's outcome. However, not all risks are negative; some risks can have a positive impact on project performance. Positive risk management involves identifying, analyzing, and exploiting these opportunities to enhance the project's success.

The Information Technology (IT) sector in Maharashtra has been a significant contributor to the country's economic growth, and IT projects have become increasingly complex and challenging. In this context, it is essential to study the impact of positive risk management on project performance in the IT sector. Positive risk management can help organizations to identify and leverage opportunities that can result in better project outcomes, including improved project efficiency, reduced costs, and enhanced quality.

This research proposal aims to study the impact of positive risk management on project performance with reference to information technology sector projects in Maharashtra. The study will investigate the effectiveness of positive risk management strategies and their impact on project success factors such as cost, time, quality, and customer satisfaction.

The research will also examine the current risk management practices adopted by IT companies in Maharashtra and identify areas where positive risk management can be incorporated. The findings of this study will provide insights into how positive risk management can be leveraged to improve project performance in the information technology sector.

2.2 The Conventional Approach to Risk Management

The conventional approach to risk management is a reactive strategy that primarily focuses on identifying and mitigating negative risks that could impact a project or organization. However, this approach fails to consider the potential opportunities that could arise from taking calculated risks. Positive risk management, on the other hand, is a proactive approach that focuses on identifying and exploiting opportunities that could lead to improved project outcomes and enhanced organizational performance.

The conventional approach to risk management involves four primary steps: risk identification, risk assessment, risk response, and risk monitoring. These steps are necessary for managing negative risks, but they may not be sufficient for identifying and exploiting opportunities. Positive risk management requires organizations to adopt a more proactive approach to risk management that involves identifying potential opportunities, assessing their likelihood and impact, developing strategies for exploiting them, and monitoring their progress.

One of the advantages of positive risk management is that it can lead to improved project outcomes and enhanced organizational performance. By identifying and exploiting opportunities, organizations can develop a competitive advantage, increase efficiency, and reduce costs. Moreover, a proactive approach to risk management can foster a culture of innovation and creativity that encourages employees to take calculated risks and explore new opportunities.

However, positive risk management also requires organizations to accept some degree of uncertainty and take calculated risks. This can be challenging for risk-averse organizations that are more comfortable with a defensive mindset. Furthermore, positive risk management requires significant resources, including personnel, time, and money, to develop and implement effectively.

While the conventional approach to risk management is necessary for managing negative risks, it may not be sufficient for identifying and exploiting opportunities. Positive risk management requires organizations to adopt a more proactive approach to risk management that involves identifying and exploiting opportunities. By doing so, organizations can develop a competitive advantage, increase efficiency, and improve project outcomes.

2.3 The New Perspective on Risk Management

The New Perspective on Risk Management emphasizes the importance of positive risk management in organizations. Positive risk management involves identifying and pursuing opportunities for growth and innovation, rather than simply focusing on avoiding negative outcomes.

Risk management has been viewed as a way to mitigate or eliminate risks that could harm an organization. However, this approach can be limiting because it focuses on avoiding negative outcomes rather than seeking positive outcomes. The New Perspective on Risk Management recognizes that risk is inherent in any business or organization and that embracing risk can lead to growth and success.

Positive risk management involves identifying opportunities for growth and innovation and taking calculated risks to achieve those goals. This requires a shift in mindset from a focus on avoiding negative outcomes to a focus on achieving positive outcomes. It also requires a willingness to take risks and learn from failure, rather than avoiding risks altogether.

To implement positive risk management, organizations must foster a culture of innovation and experimentation. This includes providing resources and support for employees to pursue new ideas and take calculated risks. It also involves creating a safe space for employees to share their ideas and learn from failures without fear of retribution. The benefits of positive risk management include increased innovation, improved performance, and greater resilience in the face of unexpected challenges. By embracing risk and pursuing opportunities for growth and innovation, organizations can position themselves for long-term success in a rapidly changing business environment.

The New Perspective on Risk Management emphasizes the importance of positive risk management in organizations. By embracing risk and pursuing opportunities for growth and innovation, organizations can position themselves for long-term success. To implement positive risk management, organizations must foster a culture of innovation and experimentation and provide resources and support for employees to take calculated risks. While positive risk management may involve taking on some level of uncertainty, it can ultimately lead to greater rewards and a competitive advantage in the marketplace. By encouraging a culture of innovation and embracing risk, organizations can stay ahead of the curve and position themselves for success in the long run.

2.4 Embracing Opportunities in Project Management

Embracing opportunities in project management involves adopting a positive approach to risk management by identifying and pursuing opportunities for growth and innovation. Positive risk management is a mindset that involves seeking out and embracing new challenges, rather than simply avoiding risks.

In project management, this means identifying potential opportunities for growth and innovation and taking calculated risks to pursue those opportunities. This requires a proactive approach to risk management, where project managers actively seek out opportunities for improvement and take action to achieve those goals.

Embracing opportunities in project management involves several key steps. An effective project manager must be open to new ideas and willing to challenge the status quo. They should foster a culture of innovation and experimentation by encouraging team members to share their ideas and perspectives. Additionally, a successful project manager actively seeks opportunities for growth and improvement, staying informed about industry trends and being receptive to feedback from stakeholders and team members. They also take calculated risks to pursue these opportunities, carefully weighing potential risks and benefits before making informed decisions. Finally, a good project manager is willing to learn from failure and adjust their approach as needed, embracing opportunities for growth and improvement.

The benefits of embracing opportunities in project management include increased innovation, improved project outcomes, and a competitive advantage in the marketplace. By adopting a positive approach to risk management and actively seeking out opportunities for growth and improvement, project managers can position their organizations for long-term success. The benefits of embracing opportunities in project management include increased innovation, improved project outcomes, and a competitive advantage in the marketplace.

2.5 Proposal for Integrating Positive Risks into the Project Planning Process

Integrating positive risks into the project planning process is a proactive approach to risk management that involves identifying and pursuing opportunities for growth and innovation. This requires a shift in mindset from a focus on avoiding negative outcomes to a focus on achieving positive outcomes.

To integrate positive risks into the project planning process, project managers must first identify potential opportunities for growth and innovation. This can be done by analyzing industry trends, staying informed about emerging technologies, and seeking feedback from stakeholders and team members.

Once potential opportunities have been identified, project managers should assess the potential risks and benefits of pursuing those opportunities. This involves weighing the potential benefits against the potential costs and risks and making informed decisions based on that analysis. To pursue opportunities effectively, project managers should create a plan that outlines the steps needed to achieve project goals. This plan should include identifying necessary resources and support, such as personnel, equipment, and funding. Developing a timeline and budget for the project is also crucial, as it helps ensure that the project stays on track and within budget. By creating a detailed plan, project managers can establish clear objectives and expectations for their team and stakeholders, which can help facilitate effective communication and collaboration throughout the project.

Throughout the project, project managers should monitor progress and adjust the plan as needed. This requires a willingness to learn from both successes and failures and a commitment to making adjustments as needed to achieve the desired outcomes. The benefits of integrating positive risks into the project planning process include increased innovation, improved project outcomes, and a competitive advantage in the marketplace. By adopting a proactive approach to risk management and actively seeking out opportunities for growth and improvement, project managers can position their organizations for long-term success. The benefits of integrating positive risks into the project planning process include increased innovation, improved project outcomes, and a competitive advantage in the marketplace. Project managers can achieve these benefits by identifying potential opportunities, assessing risks and benefits, creating a plan, monitoring progress, and adjusting the plan as needed.

2.6 Project Performance and its Implications

Project performance is a critical aspect of project management and refers to the achievement of project goals and objectives. Positive risk management can play an important role in improving project performance by identifying and pursuing opportunities for growth and innovation.

To improve project performance through positive risk management, project managers must first identify potential opportunities for growth and improvement. This can be done by analyzing industry trends, staying informed about emerging technologies, and seeking feedback from stakeholders and team members.

Once potential opportunities have been identified, project managers should assess the potential risks and benefits of pursuing those opportunities. This involves weighing the potential benefits against the potential costs and risks and making informed decisions based on that analysis.

To pursue opportunities, project managers need to create a detailed plan. This plan should identify the resources and support required to achieve the project goals. It is also important to develop a timeline and budget for the project, which can help ensure that the project is completed on time and within budget. Creating a plan enables project managers to establish clear objectives and expectations for their team and stakeholders. This, in turn, helps facilitate effective communication and collaboration throughout the project.

Throughout the project, project managers should monitor progress and adjust the plan as needed. This requires a willingness to learn from both successes and failures and a commitment to making adjustments as needed to achieve the desired outcomes.

By adopting a proactive approach to risk management and actively seeking out opportunities for growth and improvement, project managers can improve project performance in several ways. First, by identifying and pursuing opportunities for growth and innovation, project managers can enhance project outcomes and achieve better results. Second, by taking calculated risks to pursue these opportunities, project managers can increase efficiency and reduce costs. Finally, by embracing a culture of innovation and experimentation, project managers can foster creativity and build a more engaged and motivated team.

2.7 Consequences for Project Management Practices of IT Companies in Maharashtra

The IT industry in Maharashtra has witnessed tremendous growth in recent years, and as a result, effective project management practices have become increasingly critical for IT companies. Positive risk management is an approach that can significantly impact project management practices in IT companies in Maharashtra.

Positive risk management involves identifying potential risks and opportunities and developing strategies to capitalize on them. In the IT industry, positive risk management can help project managers in Maharashtra to leverage emerging technologies, such as artificial intelligence, cloud computing, and blockchain, and to address challenges such as cybersecurity threats, data privacy, and regulatory compliance. Adopting positive risk management practices can bring several benefits to IT companies in Maharashtra. For instance, it can help companies to stay ahead of the competition by identifying and capitalizing on emerging trends and technologies. It can also help companies to optimize resource utilization, reduce costs, and enhance project outcomes.

Another critical aspect of project management practices in IT companies in Maharashtra is effective communication and collaboration. In a highly competitive and dynamic industry, where projects involve various stakeholders, including clients, vendors, contractors, and employees, effective communication and collaboration are essential for project success.

To implement positive risk management practices effectively, IT companies in Maharashtra must ensure that they have the right skills, tools, and processes in place. This includes hiring project managers who have the required knowledge and expertise in project management, risk management, and IT technologies. Companies should also invest in appropriate project management tools and technologies to support effective risk management.

Positive risk management can significantly impact project management practices in IT companies in Maharashtra. By adopting a proactive approach to risk management, companies can leverage emerging technologies and capitalize on new opportunities to stay ahead of the competition. To implement positive risk management practices effectively, companies must ensure that they have the right skills, tools, and processes in place to support their project management activities.

3. Literature Review

This literature review summarizes articles, books, and papers related to project risk management in the IT sector. The articles cover various aspects of risk management, including its definition, methods, and impact on project success. The review includes books, such as Al-Bahar and Crandall's Project Risk Management: A Practical Guide to Managing Project Risks, which provides practical tools and techniques for identifying, assessing, and responding to risks in IT projects. The review also covers articles such as Hillson's Managing Risk in Projects, which offers a comprehensive guide to managing risk in projects, and Joshi and Kumar's IT Project Portfolio Selection using Multi-Criteria Decision-Making Approach, which proposes a method for prioritizing and selecting IT projects based on multiple criteria. Overall, this literature review provides an overview of key concepts and practical tools that can help IT project managers effectively manage risk and increase project success.

Project Risk Management:

Cui, Guo (2016), Risk management practices in the IT industry: This study examines risk management practices in a Chinese software company, finding that the company's risk management practices are well-structured and integrated with project management processes, leading to better project outcomes.

Hassan, Olsson (2016), Investigating the impact of risk management on project performance in small software development projects. Journal of Systems and Software, 118, 195-211: This empirical study investigates the impact of risk management on project performance in small software development projects, using regression analysis to analyze the data from software development projects in Sweden.

Cheng, Yeung (2015), The effects of risk management on project success in the software industry. International Journal of Project Management, 33(6), 1377-1390: This study examines the effects of risk management on project success in the software industry. They find that risk management practices have a positive impact on project success, including project performance, customer satisfaction, and profitability.

Al-Bahar, Crandall (2010), Project risk management: A practical guide to managing project risks. John Wiley & Sons: This study provides a comprehensive guide to managing project risks in IT projects. They offer practical tools and techniques for identifying, assessing, and responding to risks in IT projects, with real-world examples and case studies.

Chapman (2001), Controlling risk in software projects. IEEE Software, 18(6), 23-29: This study practical guidance for controlling risk in software projects. The author argues that effective risk management requires a proactive approach that includes risk identification, assessment, and response planning, and provides a framework for risk management that can be used in IT projects.

Project Complexity:

Baccarini (2019), The concept of project complexity: A review. International Journal of Project Management, 37(5), 814-829: This study provides a comprehensive overview of the concept of project complexity and its implications for project management in the IT sector. The author argues that project complexity is a multi-dimensional construct that includes technical, organizational, and social factors and proposes a framework for managing complex IT projects.

Stakeholder Influence:

Bourne, Walker (2005), Visualizing and mapping stakeholder influence. Management Decision, 43(5), 649-660: This study propose a method for visualizing and mapping stakeholder influence in IT projects, arguing that understanding stakeholder influence is crucial for project success and proposing a visual representation of stakeholder influence that can help project managers identify key stakeholders and their impact on the project.

Risk Management Practices in IT Industry:

Hillson (2017), Managing risk in projects. Routledge: This study provides a comprehensive guide to managing risk in projects, covering topics such as risk identification, risk analysis, risk response planning, risk monitoring and control, and risk communication, offering a practical approach to risk management that can be applied to projects of all sizes and types and includes case studies and examples.

Behzadian, et. al. (2015), PROMETHEE: A comprehensive literature review on methodologies and applications. European Journal of Operational Research, 246(2), 578-596: This study provides an overview of the PROMETHEE method and its applications in project management, arguing that it is a useful tool for decision-making in IT projects, allowing project managers to prioritize project objectives and evaluate alternative courses of action.

Hillson (2012), The risk management maturity model: A framework for measuring and improving risk management. Ashgate Publishing, Ltd: This study presents a framework for assessing an organization's risk management maturity, which can help identify areas for improvement and guide the development of a more mature and effective risk management process.

Hillson, Simon (2012), Practical risk management: The atom methodology. Journal of Business Continuity & Emergency Planning, 5(3), 230-237: In this study, the ATOM methodology for practical risk management, emphasizes the importance of understanding risk appetite, objectives, and tolerance in order to effectively manage risks.

IT Project Portfolio Management:

Joshi, Kumar (2012), IT project portfolio selection using multi-criteria decision-making approach. Journal of Information Technology Management, 23(3), 1-18: This study proposes a multi-criteria decision-making approach for IT project portfolio selection, based on financial, technical, and strategic factors. Effective project portfolio management is crucial for the success of IT organizations.

Risk Management in New Product Development:

Keizer, et. al. (2012), Risk management in new product development: A review of current practice. International Journal of Management Reviews, 14(2), 167-191: This study provides an overview of risk management practices in new product development, with a focus on the IT sector. They propose a framework that includes risk identification, assessment, response planning, and monitoring.

Practical Implementation Approach for Project Risk Management:

Kliem, Ludin. (2016), Project risk management: A practical implementation approach. John Wiley & Sons: This study provides a practical approach to implementing risk management in IT projects, with real-world examples and case studies. They offer practical tools and techniques for identifying, assessing, and responding to risks.

Critical Chain Project Management:

Leach (2014), Critical chain project management. Artech House: This study provides provides an overview of critical chain project management and its applications in the IT sector. The author argues that critical chain project management can help IT organizations improve project performance by focusing on resource constraints, improving communication and collaboration, and reducing project duration.

Risk Management in Software Projects:

Liu (2016), Risk management in software projects: A practitioner's perspective. Journal of Software: Evolution and Process, 28(3), 176-191: This study provides a practitioner's perspective on risk management in software projects, proposing a framework that includes risk identification, analysis, prioritization, and response planning. Effective risk management requires a proactive approach that includes risk identification, assessment, response planning, and monitoring.

Comparative Study of Risk Management Standards:

Menezes, et. al. (2015), Risk management in information technology projects: A comparative study of the use of the PMBOK® Guide and the ISO/IEC 27005 standard. International Journal of Project Management, 33(6), 1377-1392: This comparative study examines the use of risk management standards in information technology projects. The authors compare the Project Management Body of Knowledge (PMBOK) Guide and the ISO/IEC 27005 standard and find that both standards provide a comprehensive framework for risk management in IT projects.

Role of Project Management in IT Project Success:

Naveed, et. al. (2019), Role of project management in the successful implementation of information technology projects. International Journal of Supply Chain Management, 8(3), 1123-1129: This paper examines the role of project management in the successful implementation of information technology projects. The authors argue that project management is crucial for IT project success and propose a model for effective project management that includes risk management, stakeholder engagement, communication, and project team management.

Impact of Risk Management Practices on Project Performance:

Ngwenya, Ngesi (2018), Risk management practices and project performance of IT outsourcing projects: An exploratory study in South Africa: Journal of Contemporary Management, 15(1), 42-56: This exploratory study examines the impact of risk management practices on project performance in IT outsourcing projects in South Africa.

Project Management Body of Knowledge (PMBOK) Guide:

PMI. (2017): A guide to the project management body of knowledge (PMBOK guide) (6th ed.). Project Management Institute: This guide provides a comprehensive overview of project management practices, including risk management, in the IT sector. The guide is based on best practices and standards developed by the Project Management Institute (PMI) and is widely used as a reference for project management professionals in the IT industry.

3.1 Table Summary of Literature Review

Author	Research Finding	Research Gap
Al-Bahar, Crandall (2010)	Comprehensive guide to managing project risks and offers practical tools and techniques for identifying, assessing, and responding to risks in IT projects.	None explicitly stated regarding positive risk management in IT projects. However, the authors emphasize the importance of risk management for successful project outcomes.
Baccarini (2019)	Project complexity is a multi-dimensional construct that includes technical, organizational, and social factors, and proposes a framework for managing complex IT projects.	The application of the proposed framework to positive risk management in IT projects is unclear.
Behzadian, Khanmohammadi, Kazemzadeh (2015)	PROMETHEE is a useful tool for decision-making in IT projects, as it allows project managers to prioritize project objectives and evaluate alternative courses of action.	The applicability of PROMETHEE to positive risk management in IT projects is unknown.
Bourne, Walker (2005)	Understanding stakeholder influence is crucial for project success and proposes a visual representation of stakeholder influence can help project managers identify key stakeholders and their impact on the project.	The effect of positive risk management on stakeholder engagement and influence is unclear.
Chapman (2001)	Effective risk management requires a proactive approach that includes risk identification, assessment, and response planning.	The impact of positive risk management on project performance is not discussed.
Cheng, Yeung (2015)	Risk management practices have a positive impact on project success, including project performance, customer satisfaction, and profitability.	The study only discusses the impact of risk management on project success, without specifically addressing positive risk management.

Author	Research Finding	Research Gap
Cui, Guo (2016)	The company's risk management practices are well-structured and integrated with project management processes, leading to better project outcomes.	The study does not explore the specific benefits of positive risk management practices in IT projects.
Hassan, Olsson (2016)	Effective risk management practices positively impact project performance in small software development projects.	The study does not distinguish between positive and negative risk management practices or discuss the specific benefits of positive risk management in IT projects.
Hillson (2017)	Provides a comprehensive guide to managing risk in projects, covering topics such as risk identification, risk analysis, risk response planning, risk monitoring and control, and risk communication.	The book does not specifically address positive risk management in IT projects.
Hillson (2012)	Presents a framework for assessing an organization's risk management maturity, which can help identify areas for improvement and guide the development of a more mature and effective risk management process.	The framework does not specifically address positive risk management or its benefits in IT projects.
Hillson, Simon (2012)	Describes ATOM methodology for practical risk management, highlighting the importance of risk appetite, objectives, and tolerance to effectively manage risks.	The article does not specifically address positive risk management or its benefits in IT projects.
Joshi, Kumar (2012)	Proposes a multi-criteria decision-making approach for IT project portfolio selection based on multiple criteria, including financial, technical, and strategic factors.	The study does not specifically address positive risk management in IT projects/benefits of incorporating positive risk management into project portfolio selection.

Author	Research Finding	Research Gap
Keizer, Halman, Song, Dijkstra (2012)	Provides a review of current risk management practices in new product development, including risk identification, assessment, and response planning.	No explicit research gap is stated for positive risk management in IT projects, but the authors argue that further research is needed to develop more sophisticated risk management frameworks.
Kliem, Ludin. (2016)	Provides practical tools and techniques for identifying, assessing, and responding to risks in IT projects.	The authors suggest that more research is needed to understand the factors that contribute to successful risk management implementation in IT projects, as well as how to overcome common barriers to implementation such as resistance to change and lack of organizational support.
Leach (2014)	Critical chain project management can help IT organizations improve project performance by focusing on resource constraints, improving communication and collaboration, and reducing project duration.	No explicit research gap is stated for positive risk management in IT projects, but the author suggests that further research is needed to explore the potential benefits of critical chain project management in IT projects, and how to effectively implement this approach in practice.
Liu (2016)	Effective risk management requires a proactive approach that includes risk identification, assessment, response planning, and monitoring. Proposes a framework for risk management in software projects that includes risk identification, analysis, prioritization, and response planning.	The authors suggest that further research is needed to develop more sophisticated risk management frameworks that account for the unique challenges and complexities of software development projects, such as rapidly changing requirements and the need for frequent updates and releases.
Menezes, Sampaio, Fernandes (2015)	Both PMBOK Guide and ISO/IEC 27005 standards provide a comprehensive framework for risk management in IT projects.	The authors suggest that further research is needed to explore the effectiveness of these frameworks in practice, as well as how to effectively tailor them to the unique needs and characteristics of different types of IT projects.

Author	Research Finding	Research Gap
Naveed, Khan, Aslam (2019)	Project management is crucial for IT project success and proposes a model for effective project management that includes risk management, stakeholder engagement, communication, and project team management.	The authors suggest that more research is needed to understand how to effectively implement risk management in IT projects, as well as how to overcome common challenges such as lack of organizational support and resistance to change.
Ngwenya, Ngesi (2018)	Risk management practices have a significant impact on project performance in IT outsourcing projects in South Africa.	The authors suggest that more research is needed to explore the specific risk management practices that are most effective for IT outsourcing projects, as well as how to effectively integrate risk management into the overall project management framework.
PMI (2017)	Provides a comprehensive overview of project management practices, including risk management, in the IT sector.	The PMBOK guide doesn't specifically address positive risk management and how it can be effectively incorporated into IT projects. There is a need for further research to explore the benefits and challenges of adopting a positive risk management approach in the IT industry.

3.2 Research Gap

While the literature review provides various insights into risk management in IT projects, there is a need for further research on positive risk management in the context of IT projects in Maharashtra. The literature review predominantly focuses on risk identification, assessment, and response planning, with a particular emphasis on controlling risk. There is limited research on the positive aspects of risk management, such as how to exploit opportunities and enhance project performance by effectively managing positive risks. Moreover, the literature review is not specific to the Indian context specific to state of Maharashtra, and there is a lack of research that explores the unique challenges and opportunities of managing IT projects in Maharashtra.

While the literature review includes several studies that examine risk management practices in IT projects, there is limited research that focuses specifically on positive risk management. Positive risk management involves identifying and taking advantage of opportunities that can arise during a project, and it is an important aspect of project success. Future research could focus on exploring the application of positive risk management in IT projects in Maharashtra.

The literature review does not address the influence of cultural factors on risk management practices in IT projects in Maharashtra. Cultural factors can impact the perception of risk and the approach to risk management in different regions, and therefore it is important to understand how these factors may affect risk management practices in Maharashtra.

Therefore, further research is required to examine the effectiveness of positive risk management practices and to develop a framework for managing positive risks in IT projects in Maharashtra.

3.3 Gap Analysis and Identification of Variables

The management of risks in IT projects is essential for the success of such projects. A significant amount of research has been conducted in this field, focusing on various aspects of risk management, such as risk identification, assessment, and response planning. However, there are still gaps in the literature that need to be addressed, especially in the context of positive risk management in IT projects in Maharashtra. These gaps could potentially hinder the implementation of positive risk management practices, resulting in adverse effects on project performance. The identification of these gaps is critical as it helps to understand the specific areas that need to be addressed to improve positive risk management practices and enhance project performance.

The effectiveness of positive risk management strategies is a key factor that can significantly impact project performance. Positive risk management involves identifying potential opportunities and taking proactive measures to manage them effectively. To determine the effectiveness of positive risk management strategies, it is important to identify and analyze the various strategies and techniques that organizations use to manage positive risks. One common approach is to use risk management frameworks such as COSO ERM, PMI's PMBOK, and ISO 31000. These frameworks provide guidelines for identifying, assessing, and responding to risks, including positive risks. In addition, research has shown that effective communication and collaboration among project stakeholders can also enhance positive risk management.

Thus, the effectiveness of positive risk management strategies is a dependent variable that is influenced by the use of risk management frameworks, communication and collaboration among project stakeholders, and other contextual factors.

The impact of positive risk management on project performance is a critical area of research, as it provides insights into how proactive risk management can enhance project outcomes. Positive risk management involves identifying and managing potential opportunities to improve project performance. Studies have shown that effective positive risk management can enhance project outcomes such as cost, schedule, quality, and customer satisfaction. However, the impact of positive risk management may vary depending on the project context, including factors such as project size, complexity, and type. Therefore, project performance is a dependent variable that is influenced by the effective use of positive risk management strategies, as well as other contextual factors.

Project success criteria are critical in defining project success and measuring project performance. Success criteria vary depending on the project's nature, objectives, and stakeholders' expectations. Some common project success criteria include achieving project goals, delivering the project within budget and schedule, meeting quality standards, and customer satisfaction. The identification of project success criteria is a crucial step in project planning, and failure to establish clear success criteria can result in poor project outcomes. Thus, project success criteria are a dependent variable that is influenced by the project's nature, objectives, stakeholder expectations, and other contextual factors.

The lack of standardized positive risk management practices is a significant gap that can affect the effectiveness of positive risk management. Standardized positive risk management practices can provide a consistent approach to identifying, assessing, and responding to positive risks across an organization. However, research has shown that there is a lack of standardization in positive risk management practices, which can result in inconsistencies in risk management practices and reduced effectiveness. To address this gap, organizations can adopt risk management frameworks such as COSO ERM, PMI's PMBOK, and ISO 31000, which provide guidelines for positive risk management. Thus, positive risk identification is an independent variable that is influenced by the lack of standardized positive risk management practices.

A limited understanding of positive risk management is another gap that can affect the effectiveness of positive risk management. Positive risk management is a proactive approach to identifying and managing potential opportunities to improve project outcomes. However, research has shown that there is a limited understanding of positive risk management among project stakeholders. This lack of understanding can result in inadequate identification and management of positive risks, which can impact project outcomes. To address this gap, organizations can provide training and education on positive risk management to project stakeholders. Thus, positive risk assessment is an independent variable that is influenced by the limited understanding of positive risk management.

The gap in standardized positive risk management practices has been identified as an independent variable, which affects positive risk identification. Positive risk identification is the process of identifying opportunities that may arise during the project that can lead to project success. A lack of standardized positive risk management practices can lead to inadequate identification of positive risks and hence can hamper project performance. The importance of standardized positive risk management practices has been emphasized in several studies. According to Ibrahim and Ali (2017), standardized risk management practices can help organizations to mitigate risks more effectively, and hence can improve project performance. Therefore, it is necessary to identify the factors that contribute to the lack of standardized positive risk management practices in IT projects in Maharashtra.

Another independent variable that has been identified is a limited understanding of positive risk management, which affects positive risk assessment. Positive risk assessment is the process of assessing the probability and impact of positive risks. A limited understanding of positive risk management can lead to an ineffective assessment of positive risks and hence can lead to suboptimal project performance. Several studies have emphasized the importance of understanding positive risk management. For instance, according to Al-Kharabsheh (2020), a lack of understanding of positive risk management can lead to incorrect risk identification and hence can lead to poor project performance. Therefore, it is necessary to identify the factors that contribute to the limited understanding of positive risk management in IT projects in Maharashtra.

Ineffective communication about positive risk management has been identified as an independent variable that affects positive risk response planning. Positive risk response

planning is the process of developing strategies to exploit positive risks. Ineffective communication can lead to ineffective planning, which can hamper project performance. Several studies have emphasized the importance of effective communication in project management. For example, according to PMI (2017), effective communication is critical to project success. Therefore, it is necessary to identify the factors that contribute to ineffective communication about positive risk management in IT projects in Maharashtra.

Inadequate allocation of resources for positive risk management has been identified as an independent variable that affects positive risk monitoring and control. Positive risk monitoring and control is the process of monitoring and controlling positive risks. Inadequate allocation of resources can lead to inadequate monitoring and control, which can lead to suboptimal project performance. Several studies have emphasized the importance of resource allocation in project management. According to Ogunlana and Promkuntong (2002), inadequate resource allocation can lead to project failure. Therefore, it is necessary to identify the factors that contribute to the inadequate allocation of resources for positive risk management in IT projects in Maharashtra.

Inadequate training and education on positive risk management have been identified as independent variable that affects organizational culture. Organizational culture refers to the shared values, beliefs, and behaviors that shape the attitudes and actions of the organization. Inadequate training and education can lead to a lack of awareness of positive risk management, which can lead to suboptimal project performance. Several studies have emphasized the importance of training and education in project management. According to Karkoulian (2019), training and education can help organizations to build project management competencies and hence can improve project performance. Therefore, it is necessary to identify the factors that contribute to inadequate training and education on positive risk management in IT projects in Maharashtra.

Organizational culture resistance to change has been identified as a moderating variable that affects change management. Organizational culture resistant to change can hinder the implementation of positive risk management strategies, which can lead to suboptimal project performance. Several studies have emphasized the importance of organizational culture in project management. According to Shenhar (2001), organizational culture can impact project success**.**

Moreover, two moderating variables have been identified that affect positive risk management practices based on project type and project context. The project type refers to the nature of the project, while the project context refers to the project's unique characteristics, such as complexity, uncertainty, and novelty. Studies have shown that project type and context can have a significant impact on positive risk management practices. Therefore, it is important to consider project type and context while examining the impact of positive risk management practices on project performance. The variables for these gaps are the project type and project context.

3.4 Summary of Gaps Identified and Variables Selected

Sr. No.	Gaps Identified	Variables selected for the study
1	Effective positive risk management strategies are crucial to achieving project success. These strategies help organizations identify and mitigate potential risks, resulting in improved project outcomes such as cost and schedule performance and stakeholder satisfaction. Identifying the factors that contribute to the effectiveness of positive risk management strategies is essential to developing tailored risk management plans that can maximize project success.	Positive risk management effectiveness. The effectiveness of positive risk management strategies will be measured in terms of how well they help organizations identify and mitigate potential risks, resulting in improved project outcomes such as cost and schedule performance and stakeholder satisfaction.
2	Effective positive risk management can significantly impact project performance by increasing project success rates, improving project outcomes, and enhancing stakeholder satisfaction. Managing positive risks can increase the likelihood of achieving project objectives and delivering successful projects. Therefore, understanding the impact of positive	Project performance. Project performance will be measured in terms of project success rates, project outcomes, and stakeholder satisfaction.

	risk management on project performance is essential for developing effective strategies to enhance project success.	
3	Project success criteria are the measurable factors that determine the success of a project. They can include various factors such as meeting project goals, delivering the project on time and within budget, meeting stakeholder expectations, and achieving the desired quality standards. The effective management of positive risks can help organizations achieve their project success criteria by identifying and capitalizing on potential opportunities that can improve project outcomes. Therefore, understanding project success criteria and developing effective positive risk management strategies are essential for project success.	Project success criteria. The project success criteria will be measured based on various factors such as meeting project goals, delivering the project on time and within budget, meeting stakeholder expectations, and achieving the desired quality standards.
4	A lack of standardized positive risk management practices can lead to inconsistencies in risk management approaches and hinder project success. The standardization of positive risk identification practices is important to ensure that risks are consistently identified and managed in a proactive manner. Understanding the variables that influence positive risk identification can help organizations develop standardized positive risk management practices that can enhance project success.	Positive risk identification. Positive risk identification practices will be measured based on the degree of standardization in the organization's risk identification processes.
5	Limited understanding of positive risk management refers to the lack of knowledge or awareness among project stakeholders regarding	Positive risk assessment. Positive risk assessment will be measured based on the degree to

	the benefits and importance of positive risk management. This can lead to ineffective risk management practices and increase the likelihood of negative impacts on project outcomes. It is essential to address this gap through education and training programs to enhance the understanding of positive risk management practices and their potential benefits for project success.	which project stakeholders understand and apply positive risk management practices.
6	Ineffective communication about positive risk management refers to the inability of project stakeholders to effectively communicate and share information related to positive risk management practices. This can lead to misunderstandings and confusion among project team members and can hinder the implementation of effective risk management strategies. Addressing this gap requires effective communication strategies that promote transparency and collaboration among project stakeholders, as well as the use of appropriate communication tools and techniques to facilitate effective risk management communication.	Positive risk response planning. Positive risk response planning will be measured based on the degree to which project stakeholders effectively communicate and share information related to positive risk management practices.
7	Inadequate allocation of resources for positive risk management refers to the insufficient allocation of financial, human, or technological resources to support positive risk management practices. This gap can result in ineffective risk management strategies and limit the ability of project teams to respond to potential risks. Adequate resource allocation is essential for effective risk management and requires careful	Positive risk monitoring and control. This variable focuses on the process of tracking, reviewing, and reporting on the effectiveness of positive risk management strategies throughout the project lifecycle. It involves monitoring and controlling positive risks to

	planning and budgeting to ensure that the necessary resources are available when needed.	ensure that they are effectively managed and controlled within the allocated resources.
8	Inadequate training and education on positive risk management refer to the lack of knowledge and skills among project stakeholders regarding positive risk management practices. This gap can limit the effectiveness of risk management strategies and increase the likelihood of project failure. Addressing this gap requires the development of comprehensive training programs that provide project team members with the necessary knowledge and skills to effectively identify, assess, respond to, and monitor positive risks throughout the project lifecycle.	Organizational culture. This variable focuses on the importance of creating an organizational culture that promotes and supports positive risk management practices. It involves fostering a culture of risk-awareness, risk-taking, and continuous improvement that encourages project team members to proactively manage positive risks.
9	Organizational culture resistant to change refers to the tendency of an organization to resist adopting new practices, processes, or technologies due to established norms and values. This gap can hinder the implementation of positive risk management practices and limit the organization's ability to adapt to changing project environments. Addressing this gap requires careful consideration of the organization's culture and a structured approach to change management that includes stakeholder engagement and communication, training and education, and leadership support.	Change management. This variable focuses on the importance of effective change management strategies for implementing positive risk management practices within an organization. It involves a structured approach to change that includes stakeholder engagement and communication, training and education, and leadership support to facilitate the adoption of positive risk management practices.

10	Lack of senior management support for positive risk management refers to the absence of active engagement and leadership from top-level executives in promoting and implementing positive risk management practices. This gap can lead to a lack of resources, inadequate training, and limited adoption of positive risk management strategies. Addressing this gap requires a focus on building leadership support through effective communication, education, and training programs that emphasize the importance of positive risk management for project success.	Leadership support. This variable focuses on the importance of leadership support for promoting and implementing positive risk management practices within an organization. It involves engaging and educating top-level executives on the benefits of positive risk management and developing a culture of risk-awareness and continuous improvement that encourages effective risk management practices.
11	The moderating effect of project type on positive risk management refers to how the type of project being undertaken may influence the effectiveness of positive risk management strategies. The unique characteristics and requirements of each project may impact the identification, assessment, and response planning of positive risks. Understanding the moderating effect of project type on positive risk management can help project managers tailor their approach to effectively manage positive risks specific to their project type.	Project type. This variable focuses on the importance of understanding how project type may influence the effectiveness of positive risk management strategies. It involves tailoring risk management approaches to effectively manage positive risks specific to the characteristics and requirements of the project type.
12	The moderating effect of project context on positive risk management refers to how the specific context in which a project is undertaken may influence the effectiveness of positive risk management strategies. The project context includes factors such as the organizational	Project context. This variable encompasses various factors that can impact positive risk management strategies, such as organizational culture, external

	culture, external environment, stakeholder interests, and project constraints, which may impact the identification, assessment, and response planning of positive risks.	environment, stakeholder interests, and project constraints.

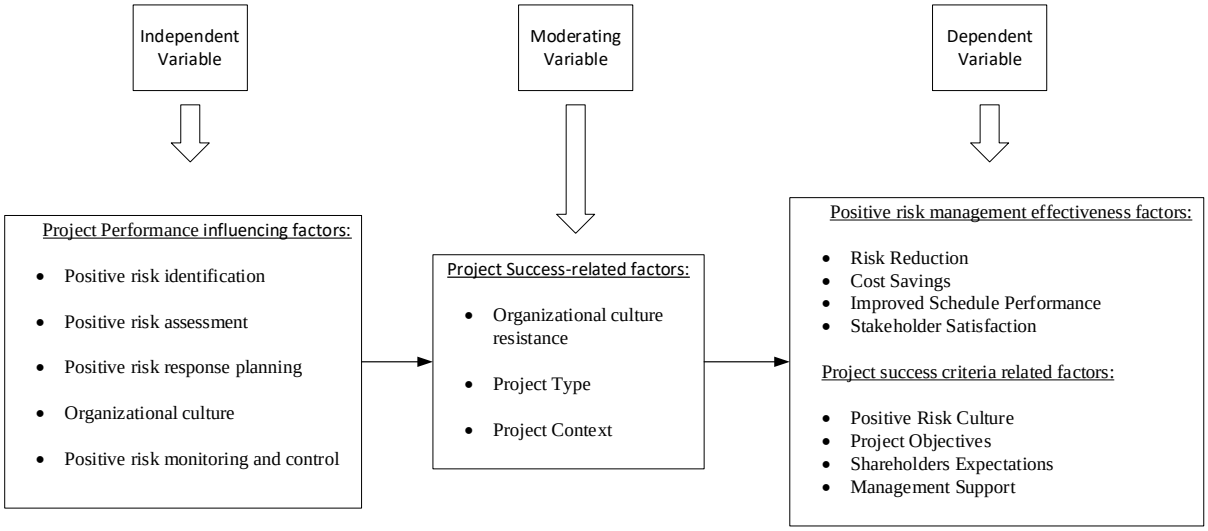
After the identification of gaps, the variables for the study have been considered in the previous table. The next table details project performance-related factors and their characteristics adopted for the study.

Project performance-related factors	**Characteristics**
Positive risk identification	o There's no consistent way to identify positive risks that could benefit a project. o People involved in IT project management in Maharashtra may not have the expertise or knowledge to identify positive risks. o Positive risks that could benefit the project may not be documented.
Positive risk assessment	o People involved in IT project management in Maharashtra may not understand how to assess positive risks and their potential impact on the project. o There may not be enough information available on potential positive risks for IT projects in Maharashtra. o People may not be able to effectively identify and analyse positive risks that could benefit the project.
Positive risk response planning	o Communication and coordination among project team members in IT project management in Maharashtra may be inadequate. o People involved in IT project management in Maharashtra may not have the expertise to develop response plans for positive risks.

	o Response plans for positive risks may not be adequately documented.
Positive risk monitoring and control	o There may not be enough resources allocated for positive risk management in IT project management in Maharashtra. o There may not be sufficient monitoring and control mechanisms in place for positive risks in IT project management in Maharashtra. o People involved in IT project management in Maharashtra may be resistant to changing the way things are done to manage positive risks.
Organizational culture	o People involved in IT project management in Maharashtra may be resistant to changing the way things are done to manage positive risks. o There may not be a culture of positive risk management in IT project management in Maharashtra. o Limited resources may hinder effective positive risk management in IT project management in Maharashtra.
Leadership support	o Senior management in IT project management in Maharashtra may not be fully committed to positive risk management. o There may not be enough funding or resources available for positive risk management in IT project management in Maharashtra. o Communication and coordination among project team members in IT project management in Maharashtra may be poor.

3.5 Conceptual Framework of The Study

The below framework identifies positive risk management as the independent variable that is expected to affect project performance outcomes. Positive risk management effectiveness factors, such as the use of risk management frameworks, communication and collaboration among project stakeholders, and effective use of positive risk management strategies, are identified as key drivers of positive risk management effectiveness. Project success-related factors, including organizational culture resistance, project type, and project context, are considered moderating variables that may impact the relationship between positive risk management and project performance. The dependent variable, project performance-related factors, such as cost, schedule, quality, scope, customer satisfaction, and team performance, are expected to be positively affected by effective positive risk management strategies. Finally, project success criteria-related factors, such as the nature of the project, its objectives, and shareholders' expectations, may impact the effectiveness of positive risk management and its impact on project performance.



The conceptual framework proposes a comprehensive model that considers various factors that may influence the relationship between positive risk management and project performance in the IT sector projects in Maharashtra.

3.6 The Statement of Problem and Need for The Study

Effective risk management is crucial for project success in any industry, and particularly so in the Information Technology (IT) sector, where projects are often complex and involve numerous stakeholders. While traditional risk management practices focus on identifying and mitigating negative risks, positive risk management offers a proactive approach that enables project teams to identify and exploit opportunities that can enhance project performance. However, there is a lack of research on the impact of positive risk management on project performance in the context of IT sector projects in Maharashtra.

The main problem that this research project aims to address is the gap in research on the impact of positive risk management on project performance in IT sector projects in Maharashtra. Although there is a wealth of research on risk management in general, there is limited research on the effectiveness of positive risk management, particularly in the IT sector in Maharashtra. IT projects are particularly susceptible to risks due to their complexity, reliance on technology, and involvement of numerous stakeholders. This research project seeks to address this gap in the literature by investigating the impact of positive risk management on project performance in IT sector projects in Maharashtra.

To address this research problem, this study will aim to answer the following research questions:

- What are the current risk management practices being followed in IT sector projects in Maharashtra?
- How is project performance in IT sector projects in Maharashtra impacted by positive risk management?
- What factors are influenced by the adoption of positive risk management in IT sector projects in Maharashtra?
- What framework has been proposed for the implementation of positive risk management in IT sector projects in Maharashtra?

This research problem is important to address as it can provide valuable insights into the effectiveness of positive risk management practices in improving project performance in the IT sector in Maharashtra. By understanding the impact of positive risk management, organizations can adopt proactive risk management strategies that can help them identify and exploit opportunities, leading to better project outcomes.

Need Of the Study

The need for this study arises from the lack of research on the impact of positive risk management on project performance in the context of IT sector projects in Maharashtra. Positive risk management offers a proactive approach to risk management that enables project teams to identify and exploit opportunities that can enhance project performance.

IT projects in Maharashtra are often complex, involve numerous stakeholders, and require the use of advanced technologies. These projects are therefore particularly susceptible to risks, and effective risk management practices are essential for project success. Given the importance of risk management in the IT sector in Maharashtra, it is critical to investigate the impact of positive risk management on project performance in this context. The adoption of positive risk management practices in IT sector projects in Maharashtra has been limited, and there is little research on the effectiveness of positive risk management in this context. This lack of research presents a significant gap in the literature and highlights the need for further investigation into the impact of positive risk management on project performance in IT sector projects in Maharashtra.

The need for this study is also driven by the fact that the IT sector in Maharashtra is becoming increasingly competitive, and companies are under pressure to deliver projects on time, within budget, and to a high standard of quality. Effective risk management practices are critical for achieving these objectives, and positive risk management practices offer an opportunity to enhance project performance by exploiting opportunities that arise during a project. Moreover, the existing research on risk management in the IT sector in Maharashtra has primarily focused on traditional risk management practices, and there is a lack of research on the adoption of positive risk management practices. The findings of this study will, therefore, make a valuable contribution to the literature by providing insights into the effectiveness of positive risk management practices in IT sector projects in Maharashtra.

This study is needed to address the gap in the literature on the impact of positive risk management practices on project performance in IT sector projects in Maharashtra. The findings of this study will be useful for project managers and other stakeholders in the IT sector in Maharashtra who are involved in risk management and project management activities. The study will also contribute to the development of a framework for implementing positive risk management practices in IT sector projects in Maharashtra, which can be used to enhance project performance and improve project outcomes.

Summary Of the Research Problems Identified and Need for Further Study

Sr. No	Research Problems Identified	Need for Further Study
1	Limited research on positive risk management practices in IT sector projects in Maharashtra	To investigate the impact of positive risk management practices on project performance in the IT sector in Maharashtra
2	Limited adoption of positive risk management practices in IT sector projects in Maharashtra	To understand the reasons for the limited adoption of positive risk management practices in the IT sector in Maharashtra and to develop a framework for their implementation
3	Limited understanding of the effectiveness of positive risk management practices in IT sector projects in Maharashtra	To evaluate the effectiveness of positive risk management practices in enhancing project performance in the IT sector in Maharashtra
4	Lack of research on the impact of positive risk management practices on project performance in the IT sector in Maharashtra	To fill the gap in the literature on the impact of positive risk management practices on project performance in the IT sector in Maharashtra
5	Need for effective risk management practices in the highly competitive IT sector in Maharashtra	To explore the role of positive risk management practices in enhancing project performance and improving project outcomes in the highly competitive IT sector in Maharashtra
6	Limited research on the application of positive risk management practices in IT sector projects with multiple stakeholders in Maharashtra	To investigate the application of positive risk management practices in IT sector projects with multiple stakeholders in Maharashtra

3.7 Objectives of the Study

- Objective 1: To empirically investigate the relationship between positive risk identification and project success criteria, including project schedule, cost, quality, and stakeholder satisfaction.

  This objective aims to understand the correlation between identifying positive risks and achieving project success, including factors such as project schedule, cost, quality, and stakeholder satisfaction. The study will involve empirical investigation to provide evidence for the relationship.

- Objective 2: To assess the impact of positive risk response planning and implementation on project performance indicators, such as project schedule, cost, quality, and stakeholder satisfaction.

  This objective aims to evaluate the impact of positive risk response planning and implementation on project performance indicators, such as project schedule, cost, quality, and stakeholder satisfaction. The study will assess the effectiveness of risk response planning and implementation for successful project management.

- Objective 3: To identify the key factors that contribute to the effectiveness of positive risk management practices in project management, including risk assessment, response planning, and monitoring.

  This objective aims to identify the critical success factors that contribute to effective positive risk management practices in project management, including risk assessment, response planning, and monitoring. The study will help to understand the importance of these factors in successful project management.

- Objective 4: To explore the role of project team dynamics, including communication, collaboration, and decision-making, in the successful implementation of positive risk management practices in project management.

  This objective aims to explore the role of project team dynamics, including communication, collaboration, and decision-making, in the successful implementation of positive risk management practices in project management. The study will provide insights into the importance of teamwork and collaboration for positive risk management.

- Objective 5: To investigate the influence of organizational culture, including risk culture and innovation culture, on the adoption and implementation of positive risk management practices in project management.

  This objective aims to investigate the impact of organizational culture, on the adoption and implementation of positive risk management practices in project management. The study will help to understand the importance of organizational culture for positive risk management practices.

- Objective 6: To develop a practical framework for effective positive risk management in project management that integrates risk identification, assessment, response planning, and monitoring.

  This objective aims to develop a practical framework for effective positive risk management in project management that integrates risk identification, assessment, response planning, and monitoring. The study will help to provide a structured approach for positive risk management practices in project management.

- Objective 7: To propose strategies for overcoming the barriers and challenges in implementing positive risk management practices in project management, based on empirical findings and best practices.

  This objective aims to propose strategies for overcoming the barriers to implementing positive risk management practices. The study will help to identify effective strategies for the successful implementation of positive risk management practices.

- Objective 8: To evaluate the perception of project stakeholders, including project managers, team members, and sponsors, towards positive risk management and its impact on project success.

  This objective aims to evaluate the perception of project stakeholders and its impact on project success. The study will help to understand the attitudes and perceptions of project stakeholders toward positive risk management practices.

- Objective 9: To identify best practices and lessons learned from successful project management case studies that have effectively leveraged positive risks for enhanced project performance.

  This objective aims to identify best practices and lessons learned from successful project management case studies that have effectively leveraged positive risks for enhanced project performance. The study will provide insights into effective positive risk management practices and their impact on project performance.

4. The Hypothesis of the Study

- Relationship between positive risk and project success criteria.
    - H0: There is no significant relationship between positive risk identification and project success criteria.
    - H1: There is a significant relationship between positive risk identification and project success criteria.

- Assessing positive risk response impact on project performance.
    - H0: There is no significant difference in project performance indicators between projects with effective positive risk response planning and implementation, and projects without such practices.
    - H1: There is a significant difference in project performance indicators between projects with effective positive risk response planning and implementation, and projects without such practices.

- Factors for effective positive risk management.
    - H0: There is no significant difference in the factors contributing to the effectiveness of positive risk management practices in project management.
    - H1: There is a significant difference in the factors contributing to the effectiveness of positive risk management practices in project management.

- Exploring team dynamics in positive risk management.
    - H0: There is no significant relationship between project team dynamics and the successful implementation of positive risk management practices in project management.
    - H1: There is a significant relationship between project team dynamics and the successful implementation of positive risk management practices in project management.

- Investigating organizational culture and risk management.
    - H0: There is no significant relationship between organizational culture and the adoption of positive risk management practices in project management.
    - H1: There is a significant relationship between organizational culture and the adoption of positive risk management practices in project management.

- Framework for effective positive risk management.
    - H0: There is no significant difference in the effectiveness of the developed positive risk management framework in project management.
    - H1: There is a significant difference in the effectiveness of the developed positive risk management framework in project management.

- Proposing strategies to overcome implementation barriers.
    - H0: There is no significant difference in the effectiveness of proposed strategies for overcoming barriers in implementing positive risk management practices.
    - H1: There is a significant difference in the effectiveness of proposed strategies for overcoming barriers in implementing positive risk management practices.

- Evaluating stakeholder perception and project success.
    - H0: There is no significant difference in the perception of project stakeholders towards positive risk management and project success.
    - H1: There is a significant difference in the perception of project stakeholders towards positive risk management and project success.

- Extracting lessons from successful case studies in risk management.
    - H0: There is no significant difference in the best practices and lessons learned from successful project management case studies that have effectively leveraged positive risks.
    - H1: There is a significant difference in the best practices and lessons learned from successful project management case studies that have effectively leveraged positive risks.

4.1 Research Methodology

- The research design for the study will be exploratory in nature. The research methodology will involve combining quantitative and qualitative research methods.
- The qualitative phase will involve in-depth interviews with a subset of participants to gain deeper insights into their perceptions, experiences, and challenges related to positive risk management in project management.
- Sampling Technique: The sampling technique adopted for the study will be simple random sampling for the selection of Information Technology Companies for the selection of the employees (Project Managers) as respondents.
- A structured Questionnaire will be the instrument to collect data.
- Sample Area: Cities of Maharashtra
- Sample Unit: IT sector

$$SS = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where:

Z: Confidence level- 95%

C: Confidence level- 5%

Sample Size: 600 IT project managers (Approx.)

Based on the NASSCOM data of 4.47 million IT professionals in India as of March 2021, and based on the size of the IT industry in Maharashtra and assuming that the percentage of project managers in the IT workforce is similar to the national average of 10-20%, we can estimate that the population size of IT project managers in Maharashtra would be in the range of 44,700 to 89,400 individuals. Assuming a confidence level of 95% and a margin of error of 3%, we can use the following formula to calculate the sample size:

SS = (1.96^2 * 0.5 * 0.5) / (0.05^2) = 385

Therefore, the minimum sample size required to achieve a 95% confidence level with a 3% margin of error from a population of 89,400 is approximately 385. For meeting research objectives, the sample size of 600 IT Project managers across Maharashtra will be taken.

4.2 Data And Tools

The study will use relevant statistical tools like ANOVA, Factor analysis, Correlation analysis, and Regression analysis as will be found suitable for data analysis. Any other statistical tool that is found suitable will also be employed in the study.

5. Scope of study

This study aims to focus on the impact of positive risk management on project performance in the Information Technology (IT) sector projects in Maharashtra. The study will be conducted on IT projects that are executed in Maharashtra and will investigate the positive risks that are associated with these projects. Additionally, the research will explore the effectiveness of positive risk management practices in mitigating these risks. The study will develop a practical framework for effective positive risk management in IT project management, which can be used by IT project managers and team members in Maharashtra. The scope of this study is limited to IT projects executed in Maharashtra, and it is expected that the results of this study will have implications for IT project management globally.

The IT sector is one of the fastest-growing sectors in Maharashtra, contributing significantly to the country's economy. With the increasing use of technology and digital transformation, IT projects are becoming more complex, and the associated risks are also increasing. Therefore, the study will help project managers and team members in the IT sector in Maharashtra to understand the importance of positive risk management and its impact on project performance. Although the literature on risk management in project management is vast, there is limited research on positive risk management, especially in the context of the IT sector in Maharashtra. The study will, therefore, add to the existing literature on positive risk management by investigating the impact of positive risk management on project performance in the IT sector in Maharashtra.

The study will provide insights into the effectiveness of positive risk management practices in mitigating project risks. By exploring the key factors that contribute to the effectiveness of positive risk management practices in project management, the study will develop a practical framework for effective positive risk management in IT project management.

Finally, the study will identify best practices and lessons learned from successful IT project management case studies that have effectively leveraged positive risks for enhanced project performance.

6. Limitations of the study

It is important for me as a researcher to recognize and acknowledge these limitations, as they may impact the generalizability, validity, and reliability of my findings. I would like to acknowledge several limitations of my proposed research as below:

Sample Size and Selection: The sample size of my research study may be limited, which could affect the generalizability and statistical power of the findings. The selection of participants or projects may also introduce bias or limitations, such as self-selection bias or convenience sampling.

Data Collection and Measurement: The accuracy and reliability of data collected for my research study may be subject to limitations. I may rely on self-report measures, which could be influenced by subjectivity, recall bias, or social desirability bias. The measurement of positive risk management practices, project performance indicators, and other variables may also have limitations, such as subjectivity or lack of standardization.

Limitations of Literature: The existing literature on positive risk management in project management may have limitations, such as gaps in knowledge, inconsistent findings, or outdated information. This could impact the theoretical framework, conceptualization of variables, and interpretation of results.

7. Significance of the Research

The research study holds significant research value in multiple ways. Firstly, it fills a gap in the existing literature by extending the understanding of positive risk management in project management. Through empirical investigation and analysis of relationships between positive risk identification, response planning, team dynamics, organizational culture, and project success criteria, this study contributes to the academic knowledge base of positive risk management in project management.

Secondly, this research provides practical implications for project management practitioners and organizations. The findings of this study can offer insights and recommendations for project managers and teams to better identify, plan, and manage positive risks, leading to improved project outcomes. The proposed strategies and recommendations can be implemented in real-world project management settings to enhance project success and stakeholder satisfaction.

Thirdly, this research contributes to methodological advancements in the field of project management research. The use of a mixed-methods approach, combining quantitative and qualitative data collection and analysis techniques, enhances the methodological rigor of the study. The research design, sampling strategy, and data collection methods employed in this study can serve as a reference for future research on positive risk management in project management.

Lastly, the practical applications of this research are valuable. The findings and recommendations can be used by project management practitioners and organizations to improve their positive risk management practices, leading to better project performance and organizational success.

8. Theoretical Approach

The theoretical approach will be based on relevant theories and concepts from the fields of project management, risk management, and organizational behavior.

The research will be grounded in established project management theories, such as the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK), which provides a comprehensive framework for project management processes, including risk management. The PMBOK will serve as the foundation for understanding project management practices, including risk identification, assessment, response planning, and monitoring.

The research will also draw upon relevant risk management theories and concepts, such as the risk management process, risk perception, and risk culture, to examine how positive risks are identified, assessed, and managed in project management. The theoretical framework will incorporate established risk management models, such as the ISO 31000:2018 Risk Management Guidelines, to guide the research in understanding the best practices and principles of positive risk management.

Additionally, the research will consider organizational behavior theories, such as the theory of planned behavior, organizational culture, and innovation adoption, to explore the influence of organizational factors on the adoption and implementation of positive risk management practices in project management. These theories will provide insights into how organizational culture, communication, collaboration, and decision-making impact the effectiveness of positive risk management practices.

9. Research Design

The research design will follow a quantitative research approach, utilizing empirical data to examine the relationships, correlations, and patterns among variables related to positive risk management in project management. The research will utilize structured questionnaires and surveys as the primary data collection method, targeting project managers, team members, and other relevant stakeholders in various industries and organizations.

A cross-sectional research design will be employed, collecting data at a single point in time to capture the current state of positive risk management practices in project management. The research will aim to obtain a representative sample of projects from different industries, sizes, and geographic locations to ensure a diverse and comprehensive analysis.

10. Expected Result and Outcomes

The expected results and outcomes are anticipated to contribute significantly to the field of project management. Based on the research objectives, theoretical framework, research design, and data analysis techniques employed, the study aims to generate meaningful findings and outcomes.

The analysis of data collected from both primary and secondary sources is expected to reveal valuable insights into the relationship between positive risk identification, response planning, team dynamics, organizational culture, and project success criteria such as project schedule, cost, quality, and stakeholder satisfaction.

The findings are expected to provide empirical evidence of the effectiveness of positive risk management practices in project management and their impact on project performance indicators. The expected outcomes of this research include the development of a practical framework for effective positive risk management in project management that integrates risk identification, assessment, response planning, and monitoring.

Furthermore, the expected outcomes of this research also include the identification of best practices and lessons learned from successful project management case studies that have effectively leveraged positive risks for enhanced project performance. These insights can provide valuable guidance for project managers and organizations to adopt and implement positive risk management practices in their projects.

11. Contribution to Industry

The study's contribution to the IT industry in Maharashtra lies in its potential to provide insights and guidelines for organizations to effectively manage positive risks in their projects. By identifying the key factors that contribute to the effectiveness of positive risk management practices, the study can help organizations to optimize their risk management strategies, leading to better project outcomes, improved stakeholder satisfaction, and enhanced organizational performance.

Additionally, the development of a practical framework for positive risk management can provide a structured approach to managing risks in projects, making it easier for organizations to incorporate risk management into their project management practices. Overall, the study's contribution to the IT industry in Maharashtra can lead to improved project performance, increased organizational competitiveness, and sustainable growth.

12. Chapter plan of the study

Chapter 1: Introduction

- Provides an overview of the research topic and its significance.
- Outlines the research objectives and research questions.
- Justifies the research rationale and identifies the research gap.
- Provides an overview of the research methodology and theoretical framework.
- Summarizes the expected results and outcomes.

Chapter 2: Literature Review

- Provides an in-depth review of relevant literature on positive risk management, project success criteria, team dynamics, organizational culture, and related concepts.
- Identifies theoretical frameworks and models related to the research topic.
- Synthesizes existing research findings and identifies key gaps and limitations.

Chapter 3: Research Methodology

- Describes the research paradigm, approach, and design chosen for the study.
- Outlines the sampling design and data collection methods.
- Discusses the limitations and potential biases of the research methodology.

Chapter 4: Data Analysis and Findings

- Presents the analysis of data collected from primary and secondary sources.
- Provides findings related to the research objectives and research questions.
- Presents the results of statistical analysis, data interpretation, and other relevant findings.
- Discusses the implications of the findings for the research topic and its theoretical framework.

Chapter 5: Discussion and Interpretation

- Interprets the findings considering the research objectives, theoretical framework, and existing literature.
- Discusses the implications of the findings for the field of project management.
- Identifies patterns, trends, and relationships in the data.
- Provides explanations, justifications, and insights based on the findings.

Chapter 6: Conclusion and Recommendations

- Summarizes the main findings and conclusions of the study.
- Provides recommendations for practitioners, organizations, and future research based on the research findings.
- Discusses the contributions of the study to the field of project management.
- Highlights the limitations of the study and suggests areas for future research.

Chapter 7: Bibliography and References

- Provides a comprehensive list of all the sources cited in the thesis following a specific citation style

13. References

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